

DERWENT-ACC-NO: 1997-430629

DERWENT-WEEK: 200402

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TITLE: Thermal printer - has thermal head unit which includes
e.g. thermal head, head holder, heat
dissipator, and
moves towards platen through rectilinear motion

PATENT-ASSIGNEE: MITSUBISHI ELECTRIC CORP[MITQ]

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PATENT-FAMILY:

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ABSTRACTED-PUB-NO: JP 09193501A

BASIC-ABSTRACT:

The printer has a thermal head (1) supported by a head holder (8).
The head
holder is attached to a heat dissipator (9). The entire thermal head
unit
shifts in different positions through rectilinear motion.

The thermal head contacts a platen (2) via an ink sheet (4) during
printing

process. Ink in the ink sheet is fixed to a recording medium (3) by the heating of the heat-emitter of the head. The head is cooled by the heat dissipator.

ADVANTAGE - Enables reduction in printer size since space needed for thermal head movement is small. Provides simple and easy-to-assemble printer since e.g. motor, deceleration group, cylindrical cam electromagnetic solenoid are used for shifting thermal head.

CHOSEN-DRAWING: Dwg.1/21

TITLE-TERMS: THERMAL PRINT THERMAL HEAD UNIT THERMAL HEAD HEAD HOLD HEAT

DISSIPATE MOVE PLATEN THROUGH RECTILINEAR MOTION

DERWENT-CLASS: P75 T04

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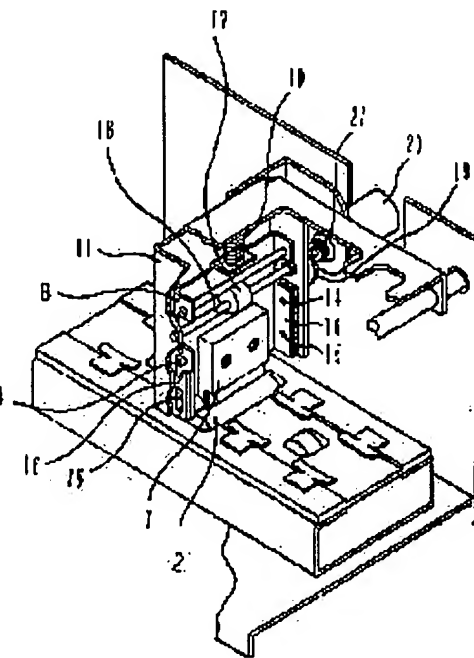
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(54) PRINTER

(57)Abstract:

PROBLEM TO BE SOLVED: To miniaturize a printer by reducing the space required in moving a thermal head by moving a thermal head unit containing a thermal head or peripheral parts not by rotary motion centering around a certain fulcrum but by linear motion.

SOLUTION: In performing printing, a motor 20 is rotated and the pinion gear fixed to the output shaft is rotated to rotate the gear 19 meshed with the gear 21 and, further, the cam shaft 18 fixed to the gear 19 is rotated to rotate the cylindrical cam 17 fixed to the cam shaft 18. At this time, the whole of a thermal head unit containing a thermal head 1 is pressed downwardly by the pressing force of a press spring 10 to be moved downwardly by the difference between the long radius and short radius of the cylindrical cam 17. The thermal head unit is moved downwardly only by linear motion when the pins 14, 15 fixed to the thermal head 1 are guided by the groove of the bearing 16 fixed to the thermal head unit holding part 11.



LEGAL STATUS

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